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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,507	07/15/2004	Masayoshi Handa	1422-0635PUS1	8270
2292 7590 05/02/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER BERNSHTEYN, MICHAEL				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
05/02/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/501,507

Applicant(s)

HANDA ET AL.

Examiner

MICHAEL M. BERNSTEYN

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action follows a response filed on February 16, 2006. No claims have been amended, cancelled or added.
2. Claims 1-7 are active.

Claim Rejections - 35 USC § 103

3. The text of this section of Title 35 U.S.C. not included in this action can be found in a prior Office Action.
4. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable as obvious over Nosokawa et al. (EP 0 889 063 A1) in view of Shimomura et al. (U. S. Patent 4,959,060), for the rationale recited in paragraph 6 of Office action dated on October, 3, 2007, and comments below.

Response to Amendment

5. The Declaration under 37 CFR 1.132 filed on February 4, 2008 is insufficient to overcome the rejection of claims 1-7 based upon 35 U.S.C. 103(a) as being unpatentable as obvious over Nosokawa et al. (EP 0 889 063 A1) in view of Shimomura et al. (U. S. Patent 4,959,060) as set forth in the last Office action because of the following.
6. It appears that the focal Applicants argument resides in the contention that there is a difference in yellow index of the resulting water-absorbent resin due to the difference in the timing of the addition of the reducing agent. In addition, there, is even a

difference in yellow index of the water-absorbent resin at 50°C, 90% relative humidity (RH) after 20 days, the water-absorbent resin of the comparative experiment showing a yellow index of exceeding 12. In other words, in the method of adding a reducing agent or an oxidizing agent to the water-absorbent resin obtained after drying, an equivalent level of an effect of preventing coloration to that in the method of adding a reducing agent or an oxidizing agent to a water-containing gelled product after the polymerization of the present invention cannot be obtained (, see Table 1, page 8).

7. As it is already mentioned in the previous Office action dated on October 3, 2007, Shimomura discloses that a body fluid-absorbing article such as, for example, a disposable diaper is provided with at least one absorbent member comprising 50 to 99% by weight of a fibrous material and 50 to 1% by weight of an absorbent polymer, which absorbent member contains at least one compound (A) selected from the group consisting of sulfur-containing **reducing agents**, antioxidants, and **oxidizing agents**. By the action of the compound (A), the swelled gel of the absorbent polymer formed in consequence of absorption of body fluid is prevented from being deteriorated or decomposed by aging (abstract).

With regard to the limitation of instant claim 1, step c), Shimomura discloses several examples of the method for the incorporation of the compound (A) in the body fluid-absorbent member, for example, (3) a method which causes the compound (A) to be contained in layers in the absorbent member by spraying a solution or dispersion of the compound (A) on the absorbent polymer **then drying the wet absorbent polymer**, when necessary, thereby producing a composite having the compound (A) deposited on

Art Unit: 1796

the absorbent polymer, and then having this composite interposed between at least two sheets of the fibrous material; (4) a method which causes the compound (A) to be uniformly contained in the absorbent member by spraying a solution or dispersion of the compound (A) on the absorbent polymer, **then drying the wet absorbent polymer**, etc.; (5) a method which causes the compound(A) to be contained in layers in the absorbent member by spraying a solution or dispersion of the compound (A) on at least one sheet of the fibrous material, **then drying the wet sheet**, etc. (col. 4, line 35 through col. 5, line 27).

It is noted that all these methods disclose the adding the compound (A), which is selected from the group consisting of sulfur-containing **reducing agents**, antioxidants, and **oxidizing agents** before drying step, not after drying like it was made during the follow-up experiments of cited references in the Declaration under 37 C.F.R. 1.132 (pages 4-7).

It is worth to mention that these compounds (A) is desired to be contained in the body fluid absorbent member in an amount in the range of 0.05 to 20 parts by weight, preferably 0.1 to 10 parts by weight, based on 100 parts by weight of the absorbent polymer, which is within the claimed range (col. 3, lines 48-52).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a reducing agent or an oxidizing agent to the polymerized water-containing gelated product in the adjusted amount before drying step as taught by Shimomura in Nosokawa's process for preparing a water-absorbent resin with reasonable expectation of success. Such body fluid-absorbing

article can be used efficiently as disposable diaper, sanitary napkin, or sweat pad because the absorbent polymer-containing absorbent member neither permits gradual deterioration of the ability thereof to hold the absorbed body fluid nor suffers from sideways leakage of the absorbed body fluid (US'060, col. 5, lines 58-64), and thus to arrive at the subject matter of instant claim 1, step c).

Response to Arguments

8. Applicant's arguments filed on February 4, 2008 have been fully considered but they are not persuasive.

9. It appears that the focal Applicants argument resides in the contention that as evidenced by the enclosed Declaration Under 37 C.F.R. 1.132, the method of adding a reducing or oxidizing agent to a water-absorbent resin after drying, according to the teaching of EP'063 and Shimomura '060, does not achieve the superior and unexpected results achieved by the presently claimed method (page 3, the last paragraph). Applicants have conducted follow-up experiments of the cited references to verify the yellow index of the final products obtained by the methods disclosed therein. The results of these experiments are discussed in the attached Declaration (page 5, 2nd paragraph).

Applicants contend that in any given production step in the method of producing a water-absorbent resin according to the present, invention, an advantageous effect is obtained, as coloration is prevented by adding a metal chelating agent and a reducing or oxidizing agent to a water-containing gelated product after polymerization. This effect is neither achieved nor suggested by the teachings of EP'063 and Shimomura '060.

Art Unit: 1796

Evidently, one skilled in the art would not have arrived at the present method based on the disclosure of the cited references (page 6, 1st paragraph).

10. In response Applicants arguments regarding Declaration Under 37 C.F.R. 1.132, see the paragraph 7 of current Office action.

As to Applicants arguments about advantageous effect is obtained, as coloration is prevented by adding a metal chelating agent and a reducing or oxidizing agent to a water-containing gelated product after polymerization, it is noted that in view of substantially identical process and ingredients for preparing a water-absorbent resin composition between Nosokawa and Shimomura, and instant claims, it is the examiner's position that the final product of Nosokawa and Shimomura's process for preparing the water-absorbent resin produced the water-absorbent composition, which possesses these properties. Since the USPTO does not have equipment to do the analytical test, the burden is now shifted to the applicant to prove otherwise. **In re Best** (CCPA 1980). 195 USPQ 430, (CCPA 1977).

11. It is well settled that the Applicants have to use the closest prior art to run a consecutive "back-to-back" test to show unexpected results, if any. "Showing unexpected results over one of two equally close prior art references will not rebut prima facie obviousness unless the teachings of the prior art references are sufficiently similar to each other that the testing of one showing unexpected results would provide the same information as to the other". **In re Johnson**, 747 F.2d 1456, 1461, 223 USPQ 1260, 1264 (Fed. Cir. 1984).

Objective evidence which must be factually supported by an appropriate affidavit or declaration to be of probative value includes evidence of unexpected results, commercial success, solution of a long-felt need, inoperability of the prior art, invention before the date of the reference, and allegations that the author(s) of the prior art derived the disclosed subject matter from the applicant. See, for example, *In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984) ("It is well settled that unexpected results must be established by factual evidence." "[A]ppellants have not presented any experimental data showing that prior heat-shrinkable articles split. Due to the absence of tests comparing appellant's heat shrinkable articles with those of the closest prior art, we conclude that appellant's assertions of unexpected results constitute mere argument."). See also *In re Lindner*, 457 F.2d 506, 508, 173 USPQ 356, 358 (CCPA 1972); *Ex parte George*, 21 USPQ2d 1058 (Bd. Pat. App. & Inter. 1991). See MPEP 716.01(c).

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL M. BERNSHTEYN whose telephone number is (571)272-2411. The examiner can normally be reached on M-Th 8-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael M. Bernshteyn/
Examiner, Art Unit 1796

Application/Control Number: 10/501,507

Page 9

Art Unit: 1796

/M. M. B./

Examiner, Art Unit 1796

/Randy Gulakowski/

Supervisory Patent Examiner, Art Unit 1796